



17th AIM International Training

17-19 FEB, TSUKUBA, JAPAN

Low Carbon Development in Cambodia

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I. Country Background

- ❑ Total area: 181,035 km².
- ❑ Population: 13,388,910 (2008)
- ❑ Growth rate: 1.54%
- ❑ The country borders to:
 - Thailand, the West
 - Lao PDR, the North
 - Vietnam, the East:
 - Gulf of Thailand, the South-west
- ❑ It is an agricultural country with 80.25% living in rural areas



II. Climate Information

- ❑ Climate is dominated by the tropical monsoon with distinct rainy/wet and dry seasons;
- ❑ Rainy season (May to Oct.), while dry season (Nov. to April);
- ❑ Average max. temp. is around 28°C, min. temp. around 22°C;
- ❑ Max. temp. exceeding 38°C;
- ❑ 1994 to 2006, the average annual rainfall has fluctuated between 1,400 mm and 1,926 mm and in the coastal areas reached 5,000 mm;
- ❑ Floods affected 1.6 million Cambodians in 1996, 3.4 million in 2000 and 1.7 million in 2001;
- ❑ Caused the death toll at 347 fatalities (80% were children), 317,975 houses damaged, infrastructures, properties and crops were estimated at US \$150 million; and
- ❑ 1990-2000 floods resulted in average annual losses of 100 lives and financial losses in the range of \$100 to 170 million.

III. Cambodia's Current Economy

- ❑ Economic base is shifting away from agriculture, forestry and fisheries to the industrial sector;
- ❑ The services sector is one of the largest sectors accounting for 36% of GDP;
- ❑ Agriculture is still important in rural areas;
- ❑ Per capita GDP rose from 1.86 million Riels in 2005 to 2.42 million Riels in 2007;
- ❑ Financial crisis and increasing food price has adversely impacted the Cambodian economy; and
- ❑ RGC set RS, NPRS and NSDP is for economic growth and poverty reduction to ensure sustainable development.

III. Energy Circumstance in Cambodia

- Demand for Electricity
 - 70% Rural population lack access to electricity
 - Kerosene is predominantly used for domestic lighting
 - Some use car batteries for lighting and TV
- Grid electricity will not be available for many years to come
- Need alternatives to supply electricity
- Solar Photovoltaics (PV) is a mature technology with a range of possible applications in Cambodia

IV. GHG Inventory

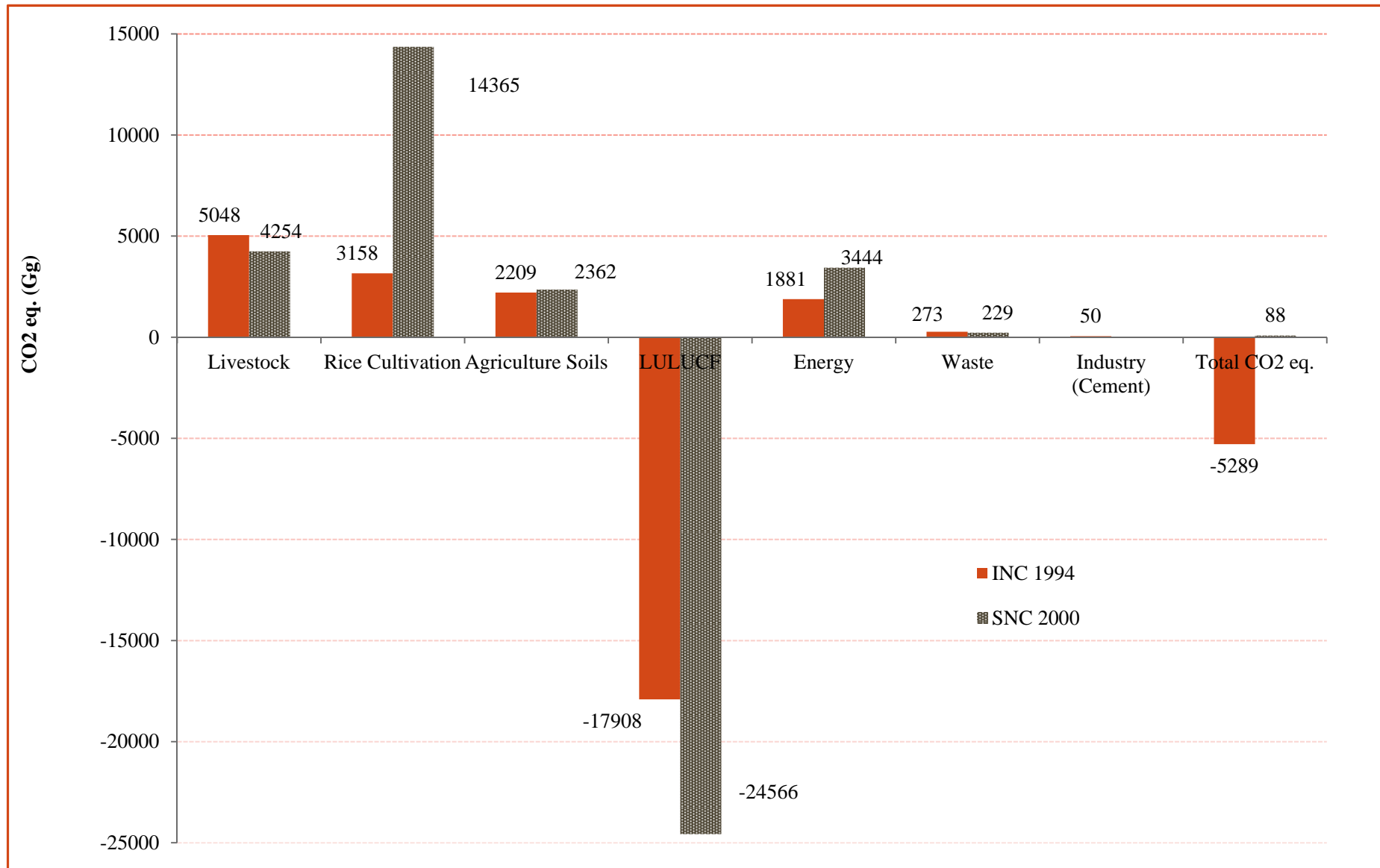
GHG Inv. 1994 and 2000 (1)

GHGs by Source and Sink	Total CO ₂ eq. (Gg)	
	GHG Inventory 1994*	GHG Inventory 2000**
Energy	1,881	3,444
Agriculture	10,560	21,112
Land Use Change & Forestry	-17,907	-24,565
Waste	273	229
Industry (Cement)	50	-
TOTAL NAT'L CO₂-eq.	-5,142	220

* Used a model adapted from the Philippines one (which was based on 1996 IPCC Guideline

** Used Revised 1966 IPCC Guidelines and UNFCCC Software Version 1.3.2 (2007)

GHG Inv. 1994 and 2000 (2)



V. Cambodia's Policies and Activities for LCS

- Ratified UNFCCC in 1995 and Kyoto protocol in 2002;
- Rectangular Strategy;
- National Strategic Development Plan;
- Laws and Decrees on Natural Resources Management;
- Established National Climate Change Committee;
- National Forest Programme and REDD Roadmap;
- National Environmental Strategy and Action Plan;
- National Policies and Strategies on Renewable Energy and Efficient Transportation;
- National Green Growth Roadmap;
- Climate Change Strategic Plan

□ LCS activities with Japan

- Dialogue between policy makers and researchers: Demands and Roles of Sustainable Low Carbon Development researches from policy perspective Low-carbon society model capacity building workshop 17-19 Nov. Bangkok, Thailand;
- Scientific Approaches towards Low Carbon Development in Cambodia: Concept, Methodology and Tools for Planning Low Carbon Development 10th Jan. 2011;
- Training workshop on the Asian-Pacific Integrated Model (AIM) 2011 from 6-17 June 2011 in Tsukuba, Japan;
- Workshop on Asian Low Carbon Society Research Network 4-5 July 2011 in Johore Bahru, Malaysia;

- 2nd International Workshop on Low Carbon Asia Research Project 31st Oct-1st Nov. in Johore Bahru, Malaysia;
- International Research Network for Low Carbon Societies (LCS-RNet) training programme 26th Sept. to 14th Oct. 2011, IGES, Japan;
- Field visit to MoEJ, JICA 16th Feb. 2012 for possible collaboration on LCS;
- Discussion on development of LCS for Cambodia with Kyoto University 10-14 Feb. 2012; and
- 17th AIM International Training 17-19 Feb. Tsukuba, Japan.

An aerial photograph of the Angkor Wat temple complex in Cambodia. The temple is a large, intricate stone structure with multiple towers and courtyards, surrounded by a dense forest of green trees. The sky is clear and blue. The text "Thanks for your attention!" is overlaid in yellow on the right side of the image.

Thanks for your attention!